In the Claims:

1-23. (Cancelled)

24. (Original) A method for determining costimulator activation thresholds in T-cells comprising:

a) coating the surface of a plurality of cells with a first protein, wherein said first protein is a lipidated protein;

b) contacting said cells with a second protein, wherein said second protein is a fusion protein comprised of a first domain having affinity for said first protein and a second domain of a costimulator;

c) mixing the contacted cells of step b with T-cells; and

d) determining the level of T-cell proliferation.

25. (Currently Amended) The method of Claim ~~21~~24, further comprising the step of e) determining cytokine secretion levels.

26. (Original) A method for treating a patient for an illness comprising:

coating the surface of a plurality of cells with a first protein, wherein said first protein is a lipidated protein; and

contacting said plurality of cells with a second protein, wherein said second protein is a fusion protein comprised of a first domain having affinity for said first protein and a second domain of a peptide, protein, or derivative or fragment thereof, having a *trans* signaling or adhesion function specific forth treatment of the illness; and

administering an effective amount of said coated cells to a patient;

27. (Original) The method of Claim 26, wherein said illness is selected from the group consisting of cancer, autoimmune diseases, and autoimmune diseases.

28. (Original) The method of Claim 27, wherein said illness is cancer and said administration is by injection into a tumor.

29. (Original) The method of Claim 26, wherein said cells are autologous.

30. (Original) The method of Claim 26, wherein said cells are allogeneic.

31. (Original) The method of Claim 30, wherein said cells are an allogeneic cell line.

32. (Original) A method for treating a patient for an illness comprising:

transferring protein to a plurality of cells by administering to said patient a first protein, which is a lipidated protein; and a second protein, which is a fusion protein comprised of a first domain having affinity for said first protein and a second domain of a peptide, protein, or derivative or fragment thereof. having a *trans* signaling or adhesion

function specific for the treatment of the illness; wherein an effective amount of cells within said patient have fusion protein transferred thereto.

33. (Original) The method of Claim 32, wherein said first protein and said second protein are administered sequentially.

34. (Original) The method of Claim 32 wherein said first protein and said second protein are administered concurrently.

35. (Original) The method of Claim 32, wherein said administration is by local injection.

36. (Original) The method of Claim 32, wherein said administration is by systemic injection.

37. (Currently Amended) A cancer vaccine comprising: tumor or other antigen presenting cells ~~produced according to the method of Claim 1~~ having a transferred fusion protein, said fusion protein transferred by coating the surface of said cells with a first protein, wherein said first protein is a lipidated protein; and

contacting said cells with a second protein, wherein said second protein is said fusion protein and is comprised of a first domain having affinity for said first protein, and a second domain having *trans* signaling and/or adhesion function, said cells in a suitable carrier.

38. (Original) The cancer vaccine of Claim 37, wherein said first protein is selected from the group consisting of lipidated protein A and lipidated protein G.

39. (Original) The cancer vaccine of Claim 37, wherein said first protein is palmitated protein A.

40. (Original) The cancer vaccine of Claim 37, wherein said first domain is attached at the amino terminus of said second protein.

41. (Original) The cancer vaccine of Claim 37, wherein said first domain is attached a the carboxyl terminus of said second protein.

42. (Original) The cancer vaccine of Claim 37, wherein said second domain encodes a type I membrane protein.

43. (Original) The cancer vaccine of Claim 37, wherein said second domain encodes a type II membrane protein.

44. (Original) The cancer vaccine of Claim 37, wherein said second domain encodes a costimulator.

45. (Cancelled)

46. (Original) The cancer vaccine of Claim 44, wherein said costimulator is selected from the group consisting of B7-1, B7-2, ICAM-1, ICAM-2, ICAM-3, CD48, LFA-3, 4-IBB ligand, CD30 ligand, CD40 ligand, and heat stable antigen.

47. (Original) The cancer vaccine of Claim 46, wherein said second protein is B7-1-$F_{c?1}$-.

48. (Cancelled)

49. (Original) The cancer vaccine of Claim 37, wherein said vaccine comprises more than one second protein.

50. (Original) The cancer vaccine of Claim 37, wherein said vaccine comprises more than one cell type, and each cell type has a different fusion protein transferred thereto.